

thought very desirable to select three to six townships of land, which shall be held as a forest reserve. Here nature should take possession; the woody plants and herbs and the harmless game should be protected.

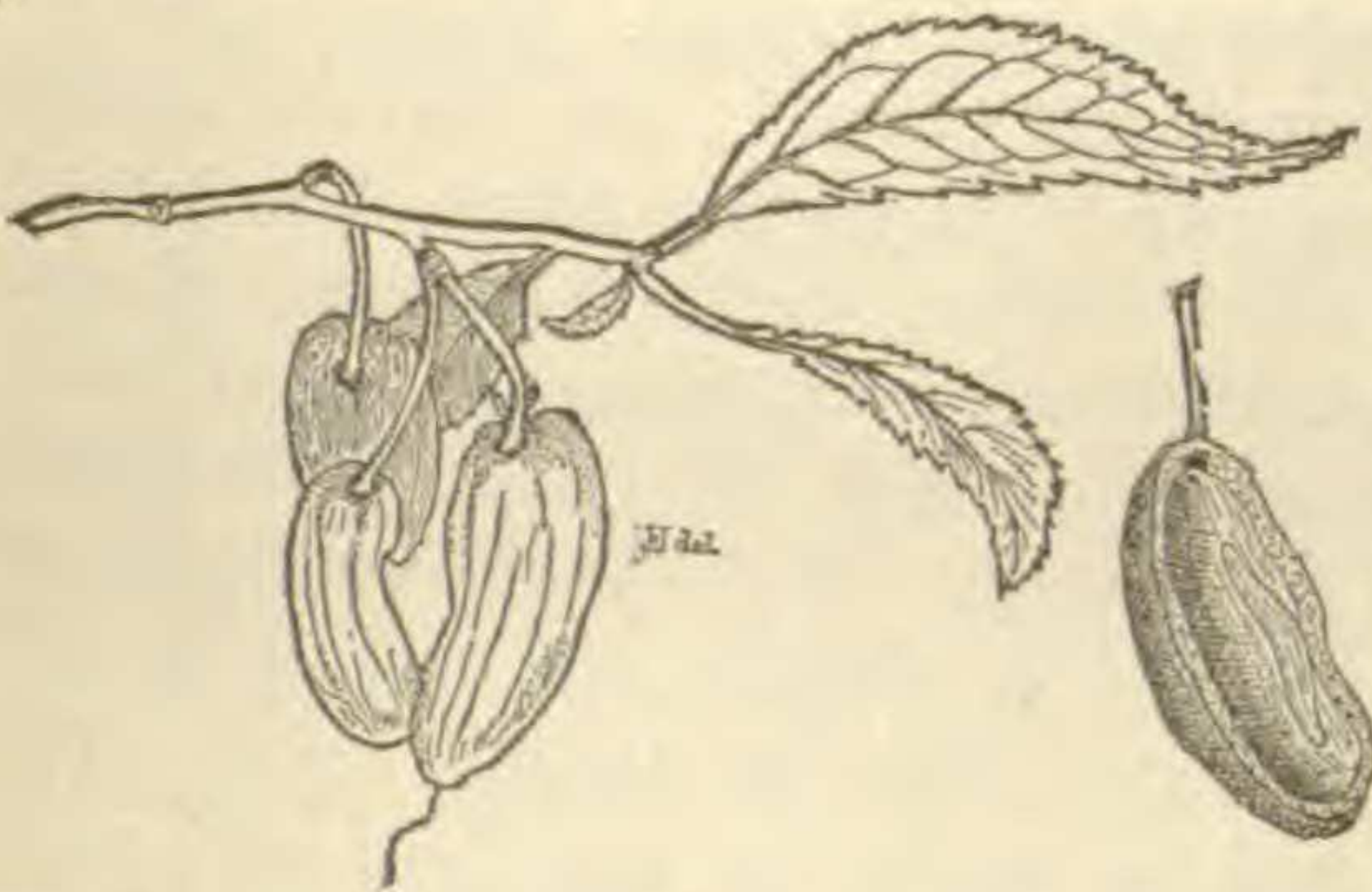
In the recently established experiment station of the Agricultural College some attention is to be given to the "jack-pine" lands, or pine plains, where *Pinus Banksiana* is the leading tree. The authorities have stations already started in five counties, viz.: Lake, Clare, Iasco, Crawford and Grand Traverse. Here the pine plains land is to be tested with grasses, other forage plants and forest trees.

W. J. BEAL.

Agricultural College, Mich.

Diseased plums.

The accompanying drawing (half natural size) represents an abnormal growth of the plum (*Prunus Americana*), produced in consequence of the attack of a fungus.



The ovary has been swollen into an inflated sac, with thick and spongy walls, and occasionally contains an elongated body, apparently the aborted ovule. The fungus causing the abnormality is known as *Ascomyces Pruni*, or *Exoascus Pruni*, or *Taphrina Pruni*. The reproductive bodies appear as a white powdery substance on the outside of the

swollen sac. Has this species been recorded in this country before now?
Oxford, Ohio.

JOSEPH F. JAMES.

Proterogynous Umbelliferae.

In the May number of the GAZETTE, p. 134, Prof. Trelease has again started the question of proterogyny in Umbelliferae.

In 1887 I made a special study of the floral characters and insect visitors of most of the species growing in my neighborhood, and I may give the general result of my observations, although I must refer the reader to a forthcoming paper for my mature views and for the details on which those views rest.

In my opinion *Hydrocotyle umbellata* (observed at Orlando, Fla.), *Eulophus Americanus*, *Cicuta maculata*, *Sium cicutæfolium*, *Osmorhiza longistylis*, *Pastinaca sativa* and *Heracleum lanatum* are proterandrous.

Sanicula Canadensis, *Cryptotaenia Canadensis* and *Cherophyllum procumbeus* are synacmic.

Sanicula Marylandica, *Erigenia bulbosa*, *Zizia aurea*, *Pimpinella integerrima* and *Polytaenia Nuttallii* are proterogynous.

Carlinville, Ill.

CHARLES ROBERTSON.